

Remarks/Arguments

In the specification, a new paragraph has been added after the paragraph ending on line 12 of page 7. This paragraph describes the function of the pumps shown in Fig. 2b, in response to the examiner's objection that while these pumps were shown in the drawings, no reference had been made to them in the specification. No new matter is added thereby, as the use of pumps in devices such as the present invention are routine, and thus well understood by those having ordinary skill in the art. Further, the pumps were included in the drawings as originally filed, and the amendment to the specification merely describes in words that which was already shown in the drawing.

Also in the specification, the paragraph beginning at page 9, line 24, has been amended to correct a typographical error noted by the examiner, and to re-label the equation as equation 5. No new matter is added thereby.

The Examiner has noted that the Information Disclosure Statement (IDS) filed October 18, 2002 fails to comply with 37 CFR 1.98(a)(2) for failing to provide a copy of US Patent No. 6,107,628. Nevertheless, the examiner has considered US Patent No. 6,107,628 and has made US Patent No. 6,107,628 officially of record by virtue of the examiner's initialing the document in the PTO form PTO/SB/08A. The applicant appreciates the examiner taking the time to retrieve a copy of US Patent No. 6,107,628 and make it of record despite the applicant's failure to comply with 37 CFR 1.98(a)(2).

The examiner has objected to claim 4 for containing an extra period, and to claim 7 for missing a period at the end of the sentence. Claim 4 has been amended to remove the extra period, and claim 7 has been amended to add a missing period as noted by the examiner.

Claims 1-16 remain in this application.

Claims 1 and 9, and all remaining claims by virtue of dependency, have been amended to include the limitation that the method and apparatus of the claimed invention include an ion funnel. The ion funnel as recited in these claims is described in the paragraph beginning at line 1, page 7, which further incorporates by reference US Patent Application Ser. No. 09/860,727 filed 5/18/01, entitled "Improved Ionization Source Utilizing a Multi-Capillary Inlet and Method of Operation" by Smith et al. and US Patent 6,107,628 entitled "Method and apparatus for directing ions and other charged particles generated at near atmospheric pressures into a region under vacuum" also issued to Smith et al. The ion funnel is also disclosed in Fig. 2b. No new matter is therefore added by the additional limitation of the ion funnel in all pending claims.

The examiner has rejected claims 1-16 under 35 USC 102 (a) as being anticipated by Tang, et al. in the publication "Generation of Multiple Electrosprays Using Microfabricated Emitter Arrays for Improved Mass Spectrometric Sensitivity", Analytical Chemistry, April 15, 2001, Vol 73, No. 8, American Chemical Society (hereinafter "the reference"). The Applicant first notes that the date of publication (2000) indicated by the Examiner for the reference is incorrect. Such is understandable, as the applicant made the same error when listing the reference in the IDS, and herein apologizes for any confusion brought about by the applicant's error. Nevertheless, as confirmed by the date shown on the reference, the reference was actually published on April 15, 2001. Accordingly, the reference was published less than a year prior to the filing date of the pending application (March 5, 2002), and cannot therefore act as a statutory bar.

As established in the affidavits of Keqi Tang and Dean Matson submitted herewith, the reference is was published *after* the applicant's date of invention and reduction to practice, and is not therefore properly considered as prior art under 35 USC 102(a). As set forth in the attached affidavits, the reference was authored by these same inventors, and the claimed invention was conceived of and reduced to practice by the same inventive entity listed on the patent application (Richard D. Smith, Keqi Tang, and Yuehe

Lin) prior to the publication of the reference. All of the experiments described within the reference were conducted by the inventors of the present invention. These experiments had to be conducted by the inventors prior to their writing the reference, or the reference could not have been written, much less published. Similarly, all of the concepts described in the reference had to have been conceived of by the inventors prior to their writing them down in the reference, or again, the reference could never have been written. Since the inventors of the present invention are also the authors of the reference, in addition to the evidence supplied by both the attached affidavits and the reference itself, as a purely logical construct it is clear that any and all aspects of the invention disclosed in the reference had to have been both conceived of and reduced to practice by the inventors prior to both the writing and the publication of the reference. Accordingly, the applicant respectfully requests that the examiner remove his rejection under 37 CFR 102(a) with respect to the reference Tang, et al. "Generation of Multiple Electrosprays Using Microfabricated Emitter Arrays for Improved Mass Spectrometric Sensitivity", Analytical Chemistry, April 15, 2001, Vol 73, No. 8, American Chemical Society.

The examiner has rejected claims 1, 3-7, 9, and 11-15 under 35 USC 102(e) as being anticipated by Corso, et al., U.S. 2002/0000517. The applicant has amended claims 1 and 9, and all remaining claims by virtue of dependency, to include the limitation that the method and apparatus of the present invention include an ion funnel. Corso, et al. neither teaches nor suggests the inclusion of an ion funnel. As such, Corso et al. cannot possibly anticipate the claims as amended. The applicant therefore respectfully requests that the examiner remove his rejection of claims 1, 3-7, 9, and 11-15 under 35 USC 102(e) as being anticipated by Corso, et al., U.S. 2002/0000517.

The examiner has rejected claims 2 and 10 under 35 USC 103(a) as being unpatentable over Corso, et al., U.S. 2002/0000517 in view of Fuhrer, et al., U.S. 2001/0032929. The applicant has amended claims 1 and 9, and all remaining claims by virtue of dependency, to include the limitation that the method and apparatus of the present invention include an ion funnel. Neither Corso, et al. or Furher et al. teach or suggest the inclusion of an ion

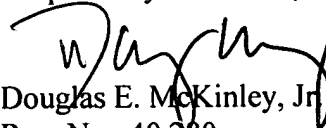
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funnel. As such, Corso, et al. and Furher et al. cannot form the basis for a prima facie case of obviousness with respect to the claims as amended. The applicant therefore respectfully requests that the examiner remove his rejection of claims 2 and 10 under 35 USC 103(a) as being unpatentable over Corso, et al., U.S. 2002/0000517 in view of Fuhrer, et al., U.S. 2001/0032929.

The examiner has rejected claims 8 and 16 under 35 USC 103(a) as being unpatentable over Corso, et al., U.S. 2002/0000517 in view of Gleim, et al. U.S. Patent 4,524,121 and further in view of Oka, et al., U.S. Patent 4,898,775. The applicant has amended claims 1 and 9, and all remaining claims by virtue of dependency, to include the limitation that the method and apparatus of the present invention include an ion funnel. Neither Corso, et al. Gleim, et al. or Oka et al. teach or suggest the inclusion of an ion funnel. As such, Corso, Gleim, et al. and Oka et al. cannot form the basis for a prima facie case of obviousness with respect to the claims as amended. The applicant therefore respectfully requests that the examiner remove his rejection of claims 8 and 16 under 35 USC 103(a) as being unpatentable over Corso, et al., U.S. 2002/0000517 in view of Gleim, et al. U.S. Patent 4,524,121 and further in view of Oka, et al., U.S. Patent 4,898,775.

Applicant has made an earnest attempt to place the above referenced application in condition for allowance and action toward that end is respectfully requested. Should the Examiner have any further observations or comments, he is invited to contact the undersigned for resolution.

Respectfully submitted,


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